Location study New brand Kruisem

Address : Gentsesteenweg 9750 Kruisem

Simulation for :

2 ultrafast charging points (maxpower :150 kW)

Brand : New brand







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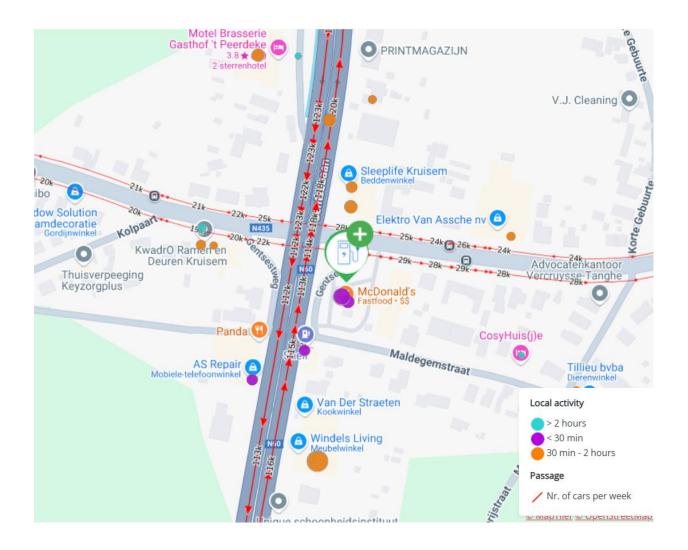
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1. Description of the simulation

In this report we show the result of a simulation with 2 ultrafast charging points (>150kW) of a charging station located at : Gentsesteenweg, 9750, Kruisem, BE





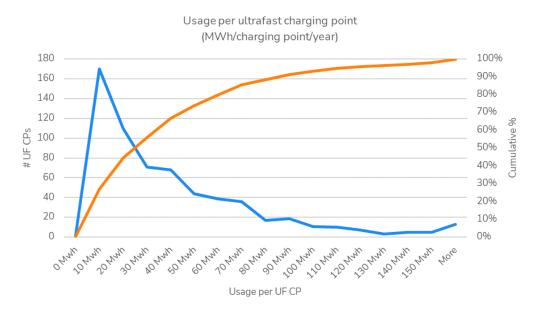


2. Predicted yearly consumption

Based on the market data, the model predicts a theoretical potential of **111.998 kWh/year (being 55.999 kWh/year per ultrafast charging point)** for this location.

In the following graphs, we compare this result with all other sites in the country.

For the 707 existing sites with ultra-fast charging points, the predictive model gives a median consumption of 26 MWh per year and per ultra-fast charging point.

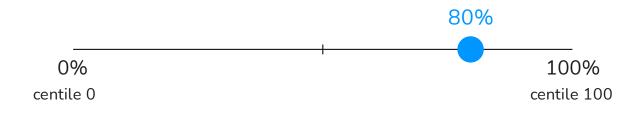


The following graph compares the expected performance (per ultra-fast charging point and per year) of the site under investigation with all existing sites in the country.

The percentile "0" corresponds to the existing site with the lowest usage, and the percentile "100" to the site with the highest usage. The blue dot corresponds to the performance of the location studied in this report :

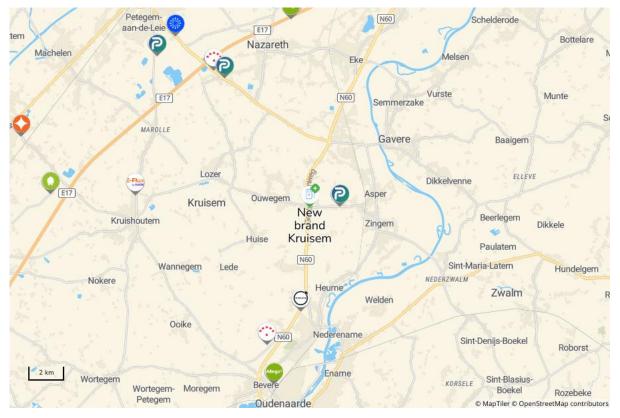
This result shows that the studied site is classed within the 20 % best sites of the country in terms of potential.

Potential (kWh/ ultrafast charging point) vs. other stations



The opening of this new location will partially cannibalize surrounding charging locations.





In this table you can find an overview of the competitors within 10 minutes drivetime.

Name of the concurrent station	Address	# Ultrafast charging points (>150kW)	Ultrafast power (kW)	# Fast charging points (49- 150kW)	Fast power (kW)	Price (€/kWh)	Drivetime (min)
Powerland Kruisem	d Kruisem Kruishoutemsesteen weg 167		N/A	2	50 kW	0,56 €/kWh	1
Powerstop Oudenaarde	Ambachtsstraat 2	2	170 kW	0	N/A	0,00 €/kWh	7
Deconinck Mobility Oudenaarde	Pruimelstraat 1A	0	N/A	2	92 kW	0,00 €/kWh	8
Boostcharge Nazareth	Steenweg Deinze 21	4	300 kW	0	N/A	0,56 €/kWh	9
Powerland Nazareth	Steenweg Deinze 33	0	N/A	1	60 kW	0,55 €/kWh	9
Allego Oudenaarde - Gentstraat 47-67	Gentstraat 47-67	2	150 kW	0	N/A	0,60 €/kWh	10
E-Flux Kruisem	Bankstraat 1	1	200 kW	0	N/A	0,68 €/kWh	10



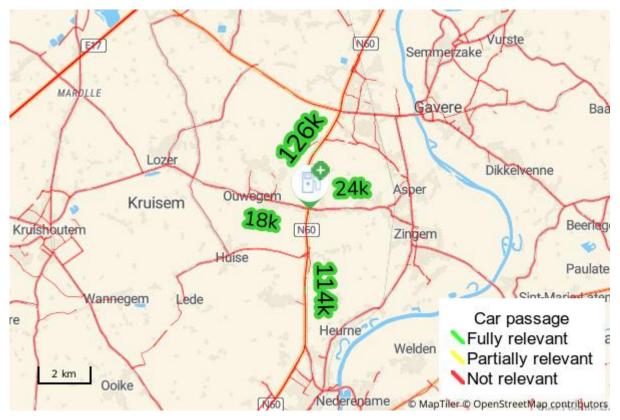


The calculation of the potential is based on the following indicators (ranked in function of importance) :

2.1. On the road potential within 3 minutes

This potential consists of the car passage (expressed in the average number of vehicles passing by per week). This potential is very important for ultrafast charging points.

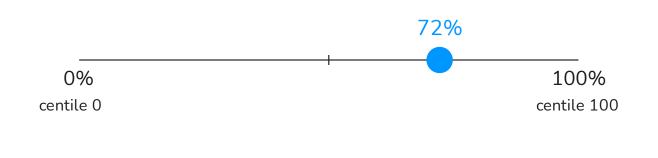
On this map, passage of each road segment is visualized. This gives an indication of the market potential related to passage in the proximity of the charging location.



The charging location has an estimation of **281.450** cars passing by per week. This is based on the 4 incoming roads with the highest passage score at 3 minutes drivetime.

With this result, the site is classed within the 28 % best sites in the country.

Cars passing by per week compared to other stations







2.2. Potential of local activity in a 300m radius

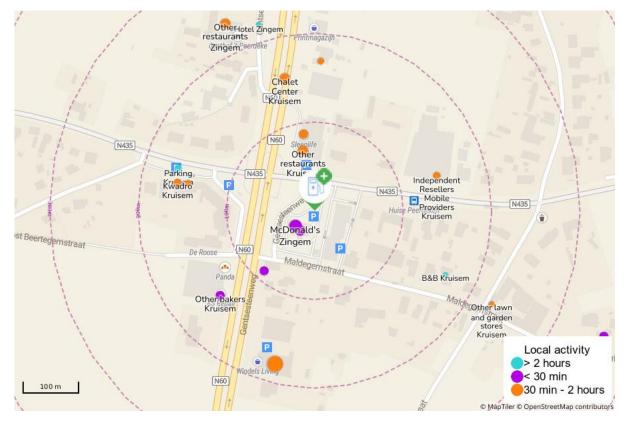
The presence of relevant local activity is important for ultrafast charging points. Mainly activity with a short visit duration (<30min) is important. Also activity with a medium long duration (30min – 2h) is partly relevant. In this study we took into account the following activity:

< 30min : fast food restaurants, shops, destination retail...

30min - 2h : non-destination retail, restaurants, bars, cinemas, sport & cultural spaces.

> 2h : work, schools, touristic places, hotels.

The figure below shows the local environment and the presence of perfect neighbours surrounding the charging location.



Less than 30min	Address	Number of visitors per year	Distance (m)
Other fastfood restaurants Kruisem	Kruishoutemsesteenweg 269	20.000	28 m
McDonald's Zingem	Kruishoutemsesteenweg 269	50.000	28 m
Gas station Kruisem	Gentsesteenweg, 50	10.000	89 m
Other bakers Kruisem	Gentsesteenweg 23	10.000	144 m
Gas station Kruisem	Gentsesteenweg, 70	10.000	276 m

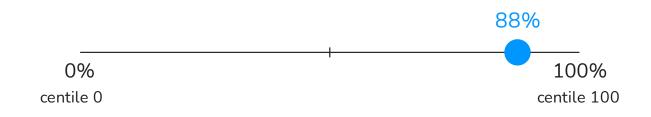




In this overview, we compare this result with those observed at other sites in the country.

With this result, the site is classed in the 12 % best sites of the country in terms of local activity potential with a short visit duration (<30min) in a 300m radius.

Local activity potential less than 30min in a 300m radius



30min - 2h	Address	Number of visitors per year	Distance (m)	
Other restaurants Kruisem	Kruishoutemsesteenweg 254	20.000	69 m	
Sleeplife Zingem	Gentsesteenweg 56	10.000	87 m	
Independent Resellers Mobile Providers Kruisem	Kruishoutemsesteenweg 242- 244	2.500	144 m	
Hoorcentrum Aerts Kruisem	Ouwegemsesteenweg 7	1.000	146 m	
Chalet Center Kruisem	Genstesteenweg 58	20.000	153 m	
Kwadro Kruisem	Ouwegemsesteenweg 7	5.000	158 m	
Child Care Kruisem	Gentsesteenweg 60	1.865	169 m	
Independent Furniture POS Kruisem Gentsesteenweg 42	Gentsesteenweg 42	100.000	179 m	
Other lawn and garden stores Kruisem	Maldegemstraat 17	631	226 m	
Other restaurants Zingem	Gentsesteenweg 45K	20.000	234 m	

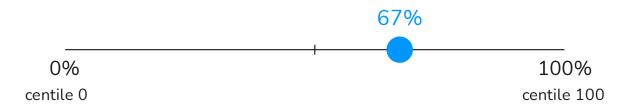
In this overview, we compare this result with those observed at other sites in the country.

With this result, the site is classed in the 33 % best sites of the country in terms of local activity potential with a medium long duration (30min-2h) in a 300m radius.





Local activity potential for visit in 30min-2h in a 300m radius

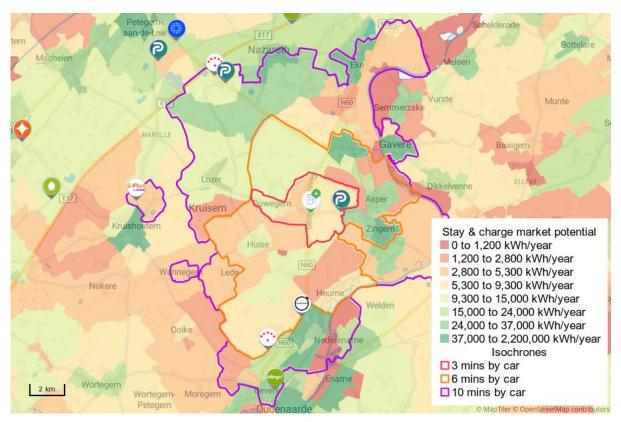


2.3. Residential and local visitor's potential

This is the destination potential that is part of the potential of consumption of residents that charge their vehicles close to their homes, their work and their activities. This is a less important potential for ultrafast charging points.

To calculate the potential per zone, we take into account the number of electrical vehicles, the wealth index, the estimated workers and the commercial activity (number of visits/year) for every zone.

On this map, you can see the stay & charge potential per zone around the charging location.







The table below shows an overview of the potential indicators, within each environment of the site :

Environment analysis	0~3 min by car	0~6 min by car	0~10 min by car				
Market potential 'stay & charge'							
Inhabitants	1.487 inhabitants	12.048 inhabitants	33.026 inhabitants				
Households	657 families	5.078 families	13.933 families				
Wealth index	112 %	114 %	112 %				
Population density	707	780	851				
Cars	1.060 cars	8.310 cars	22.115 cars				
Light commercial vehicles	178 vehicles	1.398 vehicles	3.720 vehicles				
Electric vehicles	47 vehicles	366 vehicles	971 vehicles				
Number of visits > 2 hours in the zone	16.519 visits	413.399 visits	999.175 visits				
Employees	266 FTE	2.065 FTE	11.503 FTE				
Residential potential	85 kWh/year	695 kWh/year	1.867 kWh/year				
Market space 'stay & charge'							
Stay & charge market potential	30.194 kWh/year	286.022 kWh/year	820.043 kWh/year				
Available slow charging power	66 kW	486 kW	3.779 kW				
Needed slow charging power by 2030	119 kW	1.132 kW	3.245 kW				
Developable slow charging power by 2030	53 kW	646 kW	3.245 kW				





2.4. Location quality

Visibility, accessibility & price have a significant impact on the success of a charging location.

2.4.1. Visibility : Normal

Each location in the platform can get a visibility score going from very bad to very good. This is not an automatically calculated parameter, but a manual scoring. By default, for all competitors and tested locations, the value is set to neutral unless you explicitly change it. It's useful to fill out this parameter when you are testing a specific case :

Visibility	Definition
Very good	Your location stands out & gets noticed by everyone
Good	Some positive elements, but not the best
Normal	Both positive as negative aspects, location doesn't stand out
Bad	Large part of passing traffic doesn't notice your location
Very bad	Almost nobody notices your location

For this location, the estimation of the visibility is actually set to : "Normal".

2.4.2. Micro-Accessibility : No issues

Each location in the platform can get a micro-accessibility score going from no issues to major issues. This is not an automatically calculated parameter, but a manual scoring. By default for all competitors and tested locations, the value is set to no issues unless you explicitly change it. It's useful to fill out this parameter when you are testing a specific case :

Micro-accesssibility	Definition
No issues	Able to smoothly access the location site
Minor issues	Lose time to access the location site
Major issues	Lose lots of time to access the location site

For this location, the estimation of the micro-accessibility is actually set on : "No issues".

2.4.3. Recharge price : 0,60 €/kWh

Each location present in the platform has a charging price. Which is the average price relating to the station excluding taxes and any additional parking costs (€/connected hour). The indicated price also doesn't take into account flat-rate prices (fixed price per charging session) or the price of time spent (cost per connected hour).

For this location, the ad hoc price is actually set on : 0,60 ℓ/kWh





3. Electrical grid information

The connection cost for a capacity of 1000kVA – 2000kVA is estimated by Fluvius to be less then 60k€.

Map: Connection cost for 1000kVa – 2000kVa (source: Capaciteitswijzer Fluvius)



No connection
Connection cost 0 – 60k
Connection cost 60 – 70k
Connection cost 70 – 80k
Connection cost 80 – 90k
Connection cost 90 – 100k
Connection cost > 100k





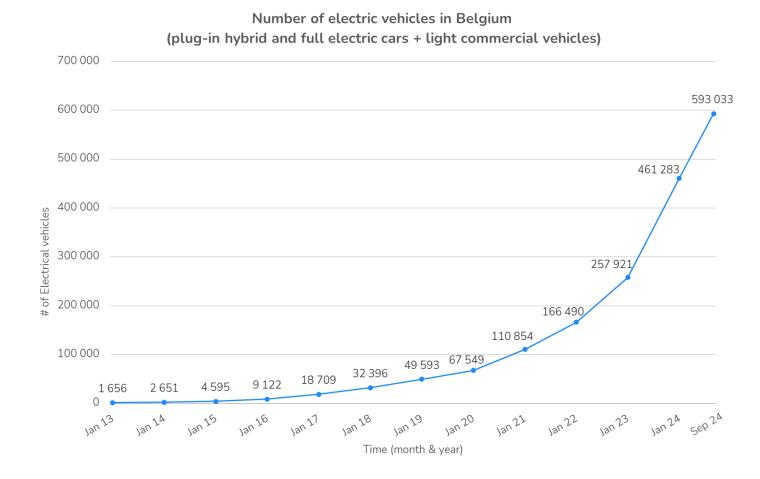
4. Interpretation of the results and market tendencies

This report of the investigation of potential is based on the most recent market data.

In this section, we give a brief overview of the different data sources used and the observed evolutions in the charging electrical vehicles market.

4.1. Number of electric vehicles in the country

The number of electrical vehicles in Belgium is fixed to 593 033 in ChargePlanner. This corresponds to an estimation of reality at the start of September 2024 and contains the cars as well as the light commercial vehicles. Of these, 48% (287 341) are fully electric vehicles, while 51% (305 692) are plug-in hybrid electric vehicles. Since January 2024, the number of electrical vehicles rose by 29%, which means that the strong growth of the last years continues.



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4.2. Competitive pressure of fast and ultra-fast charging points

In Belgium, there are 1 234 sites with at least one fast or ultrafast charging point.

	September 2024								
	Number of	Ultrafast		Fast		Slow		Price of the kW (€)	
Brand	locations (at	#	Average	#	Average	#	Average		
	least 1 F or	Charging	power	Charging	power	Charging	power	(Ultra)fast	Slow
	UF)	points	(kW)	points	(kW)	points	(kW)		
Lidl	162	6	180	321	50	173	22	0.58	0.40
Optiload	102	22	240	183	60	130	16.5	0.62	
Allego	99	260	225	90	50	105	43	0.60	0.32
Optimile	69	99	180	52	60	511	22	0.61	0.35
E-Flux	68	165	300	31	80	152	22	0.61	0.13
Powerland	54	123	300	21	60	162	22	0.62	0.21
Sparki	52	230	320					0.65	
Electra	46	267	233	4	50	27	22	0.57	0.22
Smappee	41	45	200	19	80	210	22	0.70	0.31
Electric by D'ieteren	36			56	60	86	22	0.61	0.26
Mobiflow	33	46	200	29	80	118	22	0.62	0.30
TotalEnergies	33	94	175	77	100	19	22		
Fastned	31	181	300	72	50			0.57	
CenEnergy	30			36	120	75	19	0.66	0.18
Powerstop	30	48	175	16	50	2	22	0.49	
Luminus	21	5	180	36	50	35	22	0.58	0.11
Shell Recharge	20	80	150	5	125	196	22	0.79	0.67
Tesla Supercharger	20	431	170						
Other brands	287	510	275	311	71	1 1 1 4	22	0.42	0.25
Total	1 234	2 612	224	1 359	70	3 115	23	0.48	0.29





5. About RetailSonar

From location planning to location performance. RetailSonar is **Europe's leading geomarketing company**. We optimize the location strategy for over 200 retailers in more than 15 countries.

We make the difference thanks to :



The most complete, innovative & up-to-date retail database in Europe



Accurate sales forecasts thanks to state of the art of Artificial Intelligence



An international geomarketing platform for real estate, sales & marketing

RetailSonar offers an unrivalled expertise in providing the right location strategy for all stakeholders in the fast changing EV sector.

The right location strategy for installers and distributors

- Determine the optimal locations for each type of charger
- Simulate business cases in your own data platform
- A professional market report to share with stakeholder



The right location strategy for retailers & real estate

- Determine the profitability of all your available locations
- Simulate business cases in your own data platform
- Clear guidelines to bring your strategy into practice

The right location strategy for governments & cities

- Determine the optimal regional coverage of chargers
- Simulate business case & optimize your strategy
- Realize your policy goals